

Fig. 1 Prior art

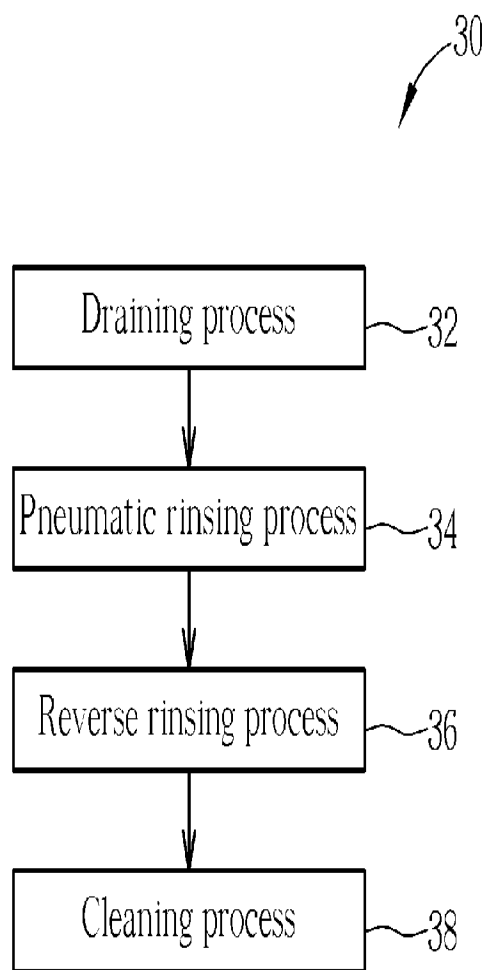


Fig. 2 Prior art

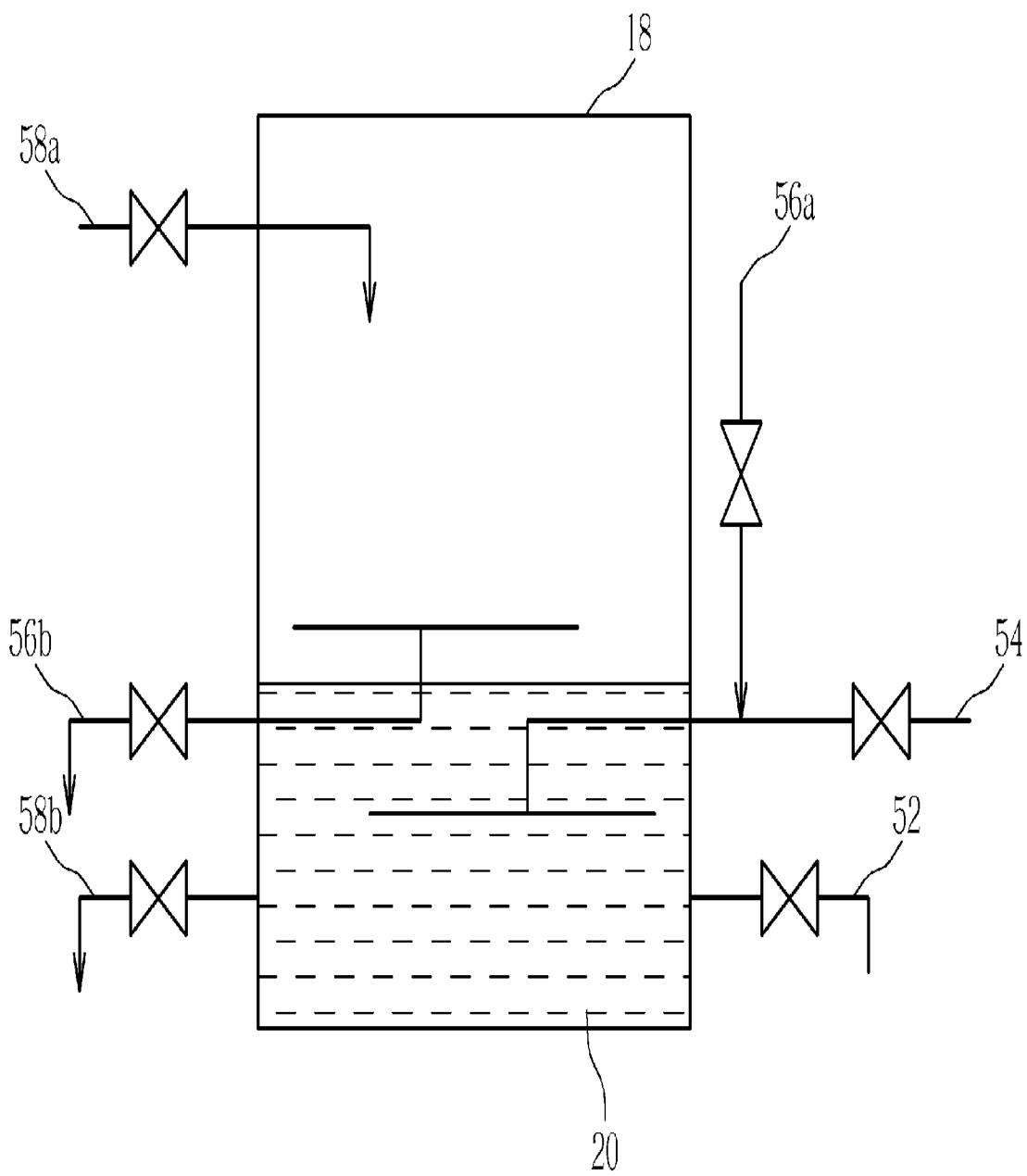


Fig. 3 Prior art

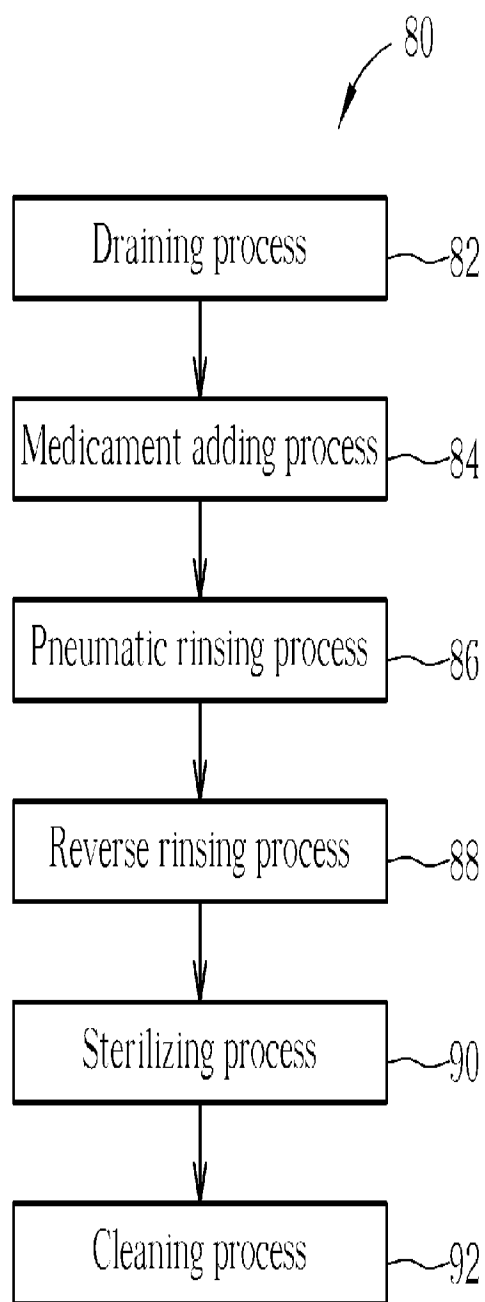


Fig. 4

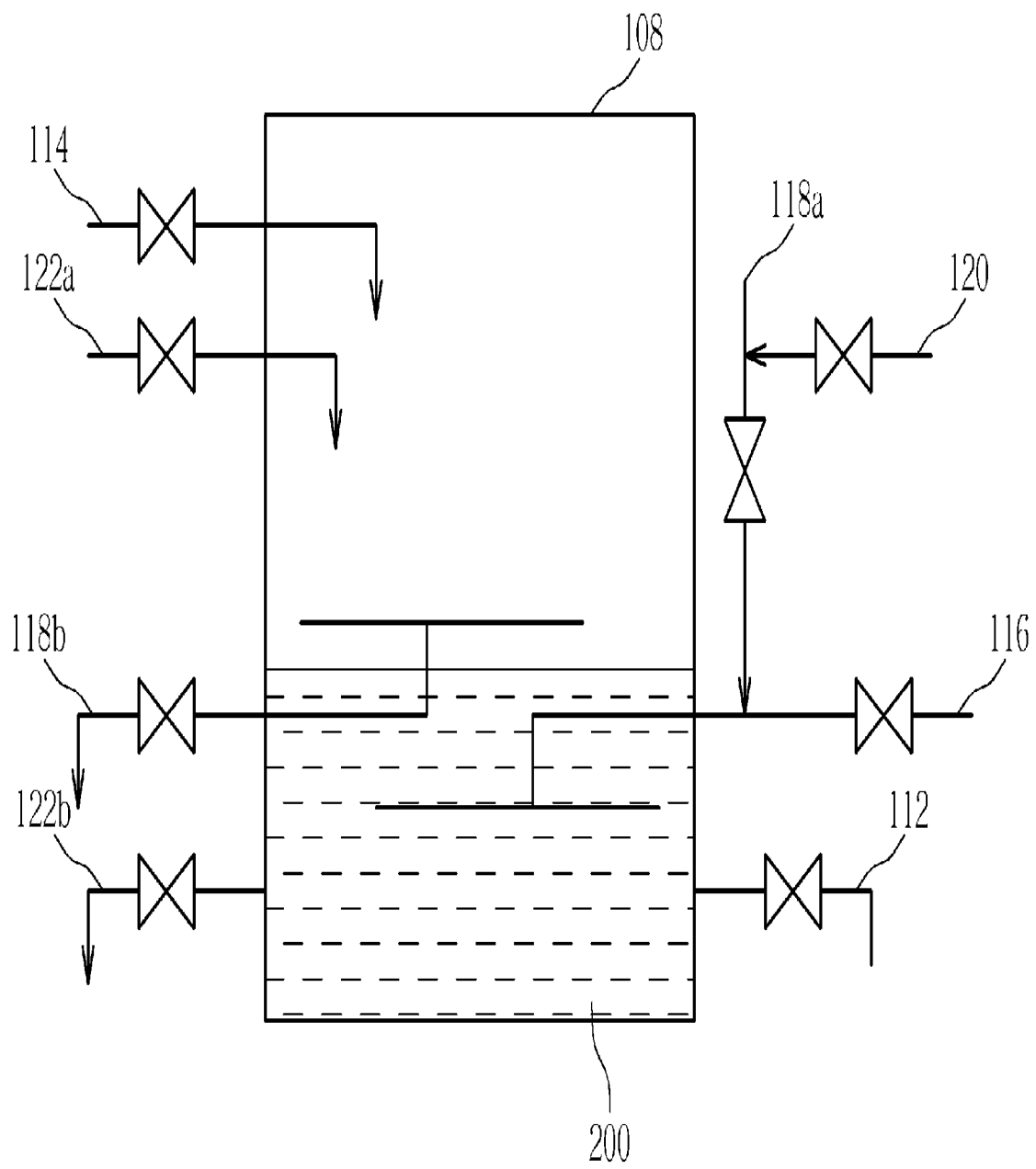


Fig. 5

PH value	Aluminum type	Effect	Flocculation condition
Under 4	$\text{Al}^{3+}$	1. neutralized charges 2. no cross-linking ability	Poor flocculation
5~6	$\text{Al}_8(\text{OH})_{20}^{4+}$	1. Positive charges 2. electrical repulsion	No flocculation
7	Few $\text{Al}_8(\text{OH})_{20}^{4+}$ Mostly $\text{Al}(\text{OH})_3$	1. Neutralized charges 2. cross-linking ability	Good flocculation
Over 9	$\text{Al}(\text{OH})_4^-$	1. negative charges 2. particle restablized	No flocculation

Fig. 6